

## Mobile devices and software applicable in Russian physical culture and sports GTO complex tests

Minkin A., Kostin V., Kostina N.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

---

### Abstract

The authors developed a mobile device and application software to record and process the GTO Complex 100m sprint test data. The mobile device was tested at the premises of Elabuga Institute of Kazan Federal University to obtain and analyse the GTO Complex test data. The overall physical fitness of the students was tested by the statistical express test method, and the test group data showed a unimodal distribution close to normal. In case of the inconsistent composition of the sample in the similar experiment, the test data distribution was bimodal. We believe that the mobile device with the application software could be beneficial for the physical education process for the reason that the system records and processes on a real-time basis the GTO test data and makes possible timely adjustments to the physical education process.

---

### Keywords

GTO, Mobile systems, Physical education., Sports standards

### References

- [1] Lubysheva L.I. Vserossiyskiy kompleks GTO kak faktor razvitiya fizkulturno-sportivnoy deyatel'nosti vuza [All-Russian GTO complex as a factor in development of academic physical education and sports activities]. Sb. nauch.-prakt. konf. «Fizicheskaya kultura, sport, turizm: nauchno-metodicheskoe soprovozhdenie» [Proc. res.-practical conf. "Physical culture, sports, tourism: scientific and methodological support" (May 15 - 16, 2014)]. PSHPU, Perm, 2014, pp. 184 - 189.
- [2] Popova A.O., Ivanova L.A., Savelyeva O.V. Motivatsiya studentov - effektivnyy sposob vypolneniya normativov kompleksa GTO [Motivation of students to meet GTO complex requirements]. Naukovedenie, 2015, no. 3 (7); Available at: <http://naukovedenie.ru/PDF/19PVN315.pdf>.
- [3] Postanovlenie Pravitel'stva RF ot 11 iyunya 2014 g. no. 540 «Ob utverzhdenii Polozheniya o Vserossiyskom fizkulturno-sportivnom komplekse "Gotov k trudu i oborone" (GTO)» [RF Government Decree dated June 11, 2014 no. 540 "On the approval of the Regulations on the All-Russian Physical Culture and Sports GTO Complex "Ready for Labor and Defense"]. Available at: [http://www.minsport.gov.ru/post540\\_11062014.pdf](http://www.minsport.gov.ru/post540_11062014.pdf).
- [4] Sinyavskiy N.I., Fursov A.V., Ivanov K., Fokina O.S. On-line-tekhnologii v sisteme podgotovki shkolnikov k vypolneniyu normativov Kompleksa «Gotov k trudu i oborone [On-line-technologies in training of pupils for "Ready for Labour and Defence" tests]. Fizicheskaya kultura: vospitanie, obrazovanie, trenirovka, 2015, no. 6, pp. 49 - 52.
- [5] Sinyavskiy N.I., Fursov A.V., Ignatov O.V., Ivanov K.G. Primenenie onlayn-servisa v korrektsii otkloneniy fizicheskoy podgotovlennosti shkolnikov k vypolneniyu normativov VFSK GTO [Application of online service to correct deviations in physical fitness of schoolchildren for implementation of RPCSC GTO standards]. Uchenye zapiski un-ta im. P.F. Lesgafta, 2015, no. 12 (130), pp. 197-200.

- [6] Sinyavskiy N.I., Fursov A.V., Kamartdinova A.A., Gerega N.N. Primenenie onlayn tekhnologiy v programmno-metodicheskom obespechenii Vserossiyskogo fizkulturno-sportivnogo kompleksa «Gotov k trudu i oborone» (GTO) [Application of online technologies in software and methodological support of Russian physical culture and sports "Ready for labour and defence" GTO complex]. Uchenye zapiski un-ta im. P.F. Lesgafta, 2015, no. 3 (123), pp.133-136.
- [7] Sposob izmereniya vynoslivosti pri podtyagivaniyakh tela v naklone: svidetelstvo no. 238260 Ros. Federatsiya. no. 2008111301/14; zayavl. 24.03.2008; opubl. 27.02.2010 [Endurance measurement method during bent over pull-ups: certif. no. 238260 RF. No. 2008111301/14; appl. 24.03.2008; publ. 27.02.2010] Bul. no. 6, 1 p.
- [8] Ustroystvo dlya kontrolya otzhimaniy ot pola: svidetelstvo no. 59983 Ros. Federatsiya. no. 2006115968/22; zayavl. 10.05.2006; opubl. 10.01.2007 [Push-ups control device: certificate no. 59983 ROPP. RF. No. 2006115968/22; appl. 10.05.2006; publ. 10.01.2007], Bul. no. 1, 1 p.
- [9] Ustroystvo I.V. Meskina dlya opredeleniya dliny pryzhka: svidetelstvo no. 1591233 SSSR. no. 4230845/12; zayavl. 16.04.1987; opubl. 20.11.1996 [Meskin's jump length measurement device: certificate no. / The USSR. No. 4230845/12; appl. 16.04.1987; publ. 11/20/1996]. Bul. no. 32, 2 p.
- [10] Sherin V.S., Zamyatin A.V., Sherina E.A., Kolyaskina T.Y. Mobilnoe prilozhenie kak faktor effektivnoy podgotovki cheloveka k vyipolneniyu normativov Kompleksa GTO [Mobile application tool to facilitate training for GTO Complex tests]. Teoriya i praktika fiz. kultury, 2017, no. 4, pp. 89-90.